AMENDMENTS TO THE CLAIMS

Docket No.: 12810-00151-US

- 1. (Original) A process for preparing a hydroxylation catalyst by
 - i) embedding a cytochrome P450 monooxygenase in a sol-gel matrix,
- ii) embedding an enzymatic NADPH-regenerating system in a sol-gel matrix, and combining the two components i) and ii) unless they were already mixed together before the embedding.
- 2. (Original) A process as claimed in claim 1, wherein enzymes which had originally been isolated from the genus Bacillus are used as monooxygenases.
- 3. (Original) A process as claimed in claim 2, wherein the monooxygenases have been isolated from Bacillus megaterium.
- 4. (Original) A preparation comprising a cytochrome P450 monooxygenase and an enzymatic NADPH-regenerating system in a sol-gel matrix.
- 5. (Currently amended) A process for the enzymatic hydroxylation of a substrate by reacting the substrate with a hydroxylation catalyst which can be prepared as claimed in any of claims 1 to 3 claim 1.
- 6. (Original) A process as claimed in claim 5, wherein β-ionone is employed as substrate.